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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,818	06/18/2001	James F. McGuckin JR.	1243	2564

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EXAMINER	
BAXTER, JESSICA R	
ART UNIT	PAPER NUMBER
3731	

DATE MAILED: 08/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/883,818	MCGUCKIN ET AL.	
	Examiner	Art Unit	
	Jessica R Baxter	3731	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 19-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 19-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *13* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 21, 2003 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 22, 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,683,411 to Kavteladze et al.

Regarding claims 1, 26 and 29, Kavteladze discloses a vessel filter comprising a first filtering portion (body 1) and a first anchoring portion (wire members 8), a transverse dimension of the first filtering portion in an expanded configuration being less than a transverse dimension of the first anchoring portion in an expanded configuration (FIG. 1), an end portion of the first anchoring portion spaced from the first filtering portion converging to a first converging section (intersection of wire members 8), and a second filtering portion (body 2) and a second anchoring portion (wire members 8), a transverse dimension of the second filtering portion being less than a transverse dimension of the second anchoring portion (FIG. 1), an end portion of the second anchoring portion spaced from the first filtering portion converging to a second converging section

(intersection of wire members 8), the first and second filtering portions being positioned closer to each other than the first and second anchoring portions and being configured to allow continuous blood flow therethrough while capturing clots, and the anchoring portions being formed on first and second opposite portions of the vessel filter (FIG. 1).

Regarding claim 4, Kavteladze discloses a first anchoring member extending from the first anchoring portion and a second anchoring member extending from the second anchoring portion (anchoring members 7).

Regarding claim 22, Kavteladze discloses that the anchoring portions have opposing sharpened ends (anchoring members 7 at each end of wire members 8).

4. Claims 1, 2, 7, 8, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,725,552 to Kotula et al.

Regarding claim 1, Kotula discloses a vessel filter comprising a first filtering portion (64) and a first anchoring portion (66), a transverse dimension of the first filtering portion in an expanded configuration being less than a transverse dimension of the first anchoring portion in an expanded configuration (FIG. 5A), an end portion of the first anchoring portion spaced from the first filtering portion converging to a first converging section (15), and a second filtering portion (64) and a second anchoring portion (66), a transverse dimension of the second filtering portion being less than a transverse dimension of the second anchoring portion (FIG. 5A), an end portion of the second anchoring portion spaced from the first filtering portion converging to a second converging section (15), the first and second filtering portions being positioned closer to each other than the first and second anchoring portions and being configured to allow continuous blood flow therethrough while capturing clots (Column 11 lines 17-32), and the anchoring portions being formed on first and second opposite portions of the vessel filter (see attached FIG. 5A).

Regarding claim 2, Kotula discloses a sleeve positioned between the first and second filtering portions (middle portion 62).

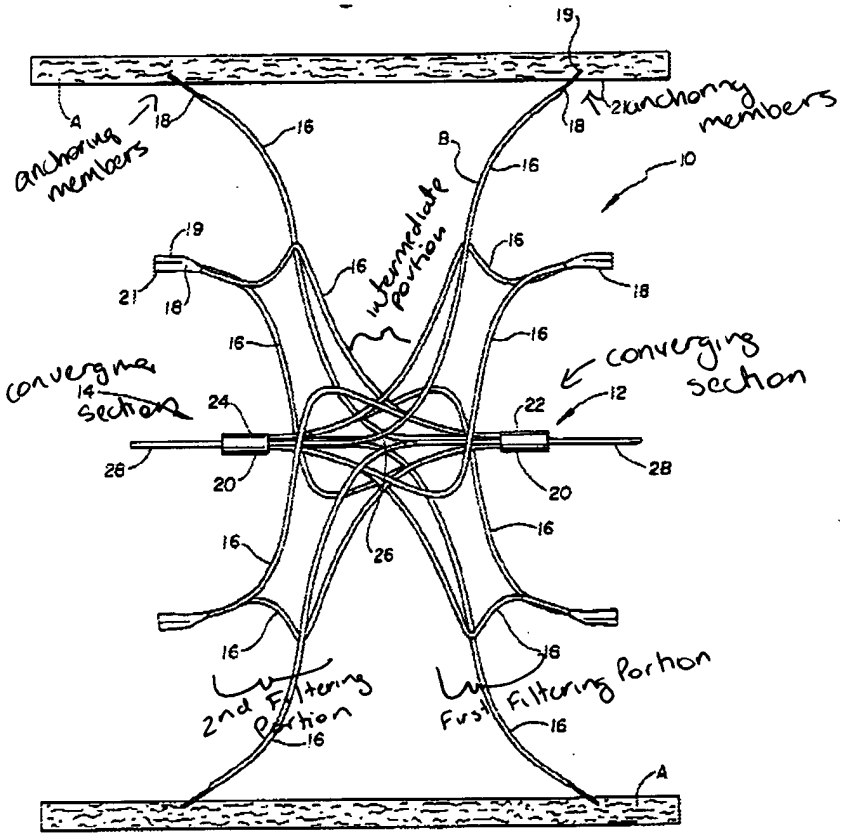
Regarding claim 7, Kotula discloses that the transverse dimensions of the first and second anchoring portions are substantially equal and the transverse dimensions of the first and second filtering portions are substantially equal (FIG. 5A).

Regarding claims 8 and 28, Kotula discloses that each of the filtering portions progressively increases in diameter to its respective anchoring portion, the anchoring portions being on opposing sides of the filter with the filtering portion therebetween (FIG. 5A).

5. Claims 1, 4, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,746,767 to Smith.

Regarding claim 1, 4 and 26, Smith discloses a vessel filter comprising a first filtering portion and a first anchoring portion, a transverse dimension of the first filtering portion in an expanded configuration being less than a transverse dimension of the first anchoring portion in an expanded configuration, an end portion of the first anchoring portion spaced from the first filtering portion converging to a first converging section, and a second filtering portion and a second anchoring portion, a transverse dimension of the second filtering portion being less than a transverse dimension of the second anchoring portion, an end portion of the second anchoring portion spaced from the first filtering portion converging to a second converging section, the first and second filtering portions being positioned closer to each other than the first and second anchoring portions and being configured to allow continuous blood flow therethrough while capturing clots, and the anchoring portions being formed on first and second opposite portions of the vessel filter (see attached FIG. 2).

Regarding claim 27, Smith discloses a connecting element at each converging section (hubs 22 and 24).



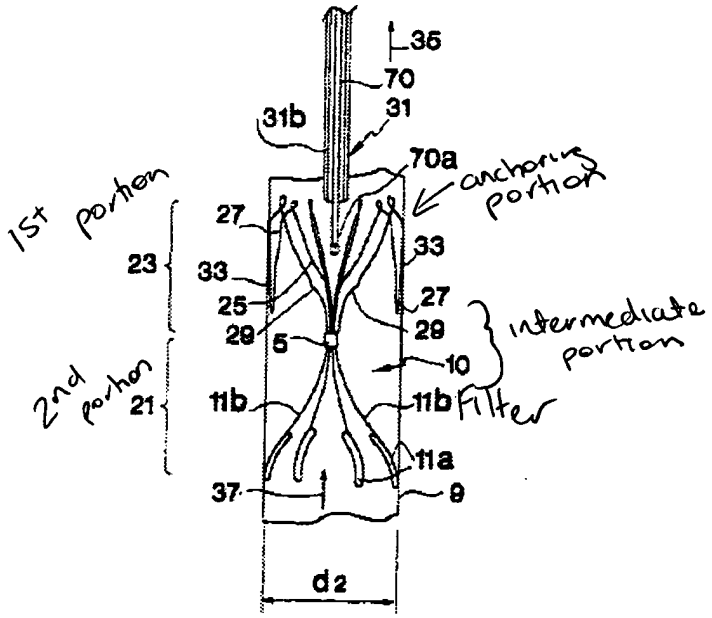
6. Claims 9, 13 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,755,790 to Chevillon et al.

Regarding claim 9, Chevillon discloses a surgical apparatus comprising a vessel filter having a first portion, a second portion and an intermediate portion between the first and second portions (FIG. 5), the first portion increasing in diameter from the intermediate portion towards a first end, and the second portion increasing in diameter from the intermediate portion towards a second end, a region closer to the intermediate portion forming a filter portion and a region further from the intermediate portion forming an anchoring portion to retain the filter within the vessel, and the filter being configured to allow continuous blood flow therethrough while capturing clots, the anchoring

portion dimensioned to contact the vessel wall and are spaced radially from a central axis of the apparatus, wherein elements of the anchoring portion extend radially distally in a first direction and bend back to extend proximally in a second proximally in a second direction (see attached FIG. 5).

Regarding claim 13, Chevillon discloses that the filter is a shape memory material (Column 4 lines 37-44).

Regarding claim 19, Chevillon discloses that the filter comprises a plurality of anchoring members spaced from a proximalmost and distalmost end of the filter (portions 11a and hooks 33).

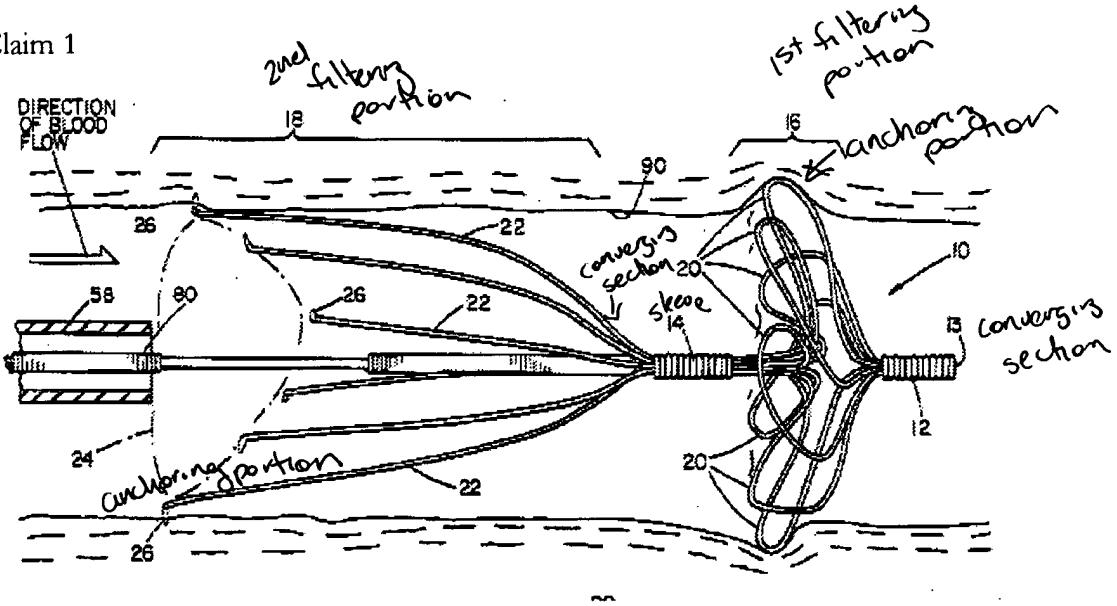


7. Claims 1, 2, 3, 7, 8-11 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,425,908 to Simon.

Regarding claim 1, Simon discloses a vessel filter comprising a first filtering portion and a first anchoring portion, a transverse dimension of the first filtering portion in an expanded configuration being less than a transverse dimension of the first anchoring portion in an expanded configuration, an end portion of the first anchoring portion spaced from the first filtering portion

converging to a first converging section, and a second filtering portion and a second anchoring portion, a transverse dimension of the second filtering portion being less than a transverse dimension of the second anchoring portion, an end portion of the second anchoring portion spaced from the first filtering portion converging to a second converging section, the first and second filtering portions being positioned closer to each other than the first and second anchoring portions and being configured to allow continuous blood flow therethrough while capturing clots, and the anchoring portions being formed on first and second opposite portions of the vessel filter (see attached Figure 1).

Claim 1



Regarding claim 2, Simon discloses a sleeve positioned between the first and second filtering portions sleeve 14).

Regarding claim 7, Simon discloses that the transverse dimensions of the first and second anchoring portions are *substantially* equal and the transverse dimensions of the first and second filtering portions are *substantially* equal.

Regarding claims 8, Simon discloses that each of the filtering portions progressively increases in diameter to its respective anchoring portion.

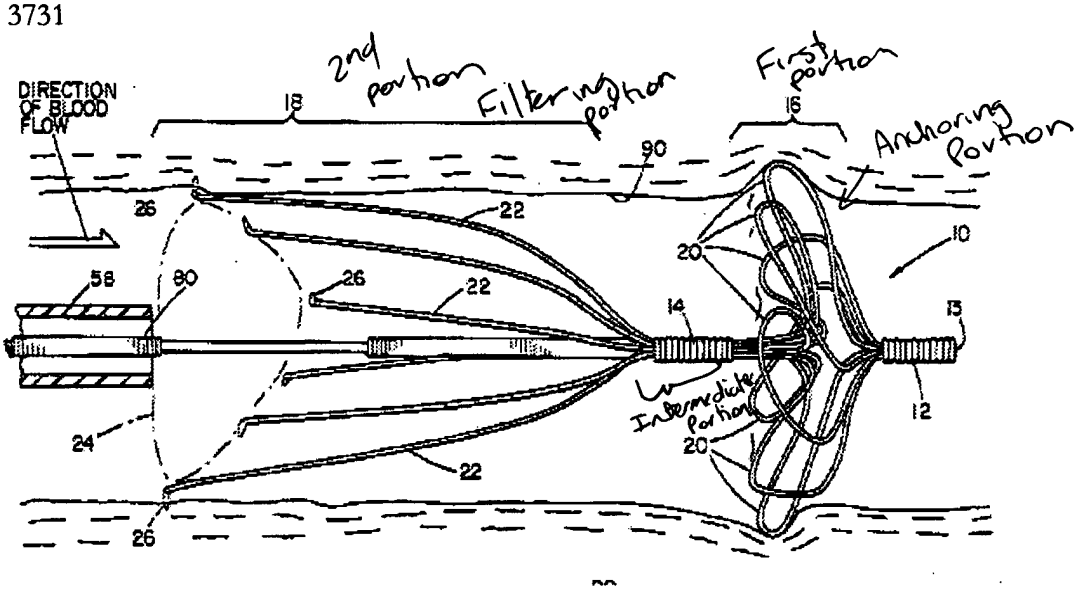
Regarding claim 9, Simon discloses a surgical apparatus comprising a vessel filter having a first portion, a second portion and an intermediate portion between the first and second portions, the first portion increasing in diameter from the intermediate portion towards a first end, and the second portion increasing in diameter from the intermediate portion towards a second end, a region closer to the intermediate portion forming a filter portion and a region further from the intermediate portion forming an anchoring portion to retain the filter within the vessel, and the filter being configured to allow continuous blood flow therethrough while capturing clots, the anchoring portion dimensioned to contact the vessel wall and are spaced radially from a central axis of the apparatus, wherein elements of the anchoring portion extend radially distally in a first direction and bend back to extend proximally in a second proximally in a second direction (see attached FIG. 1).

Regarding claim 10, Simon discloses that the filter is formed by at least one wire, each wire forming a part of the first, second, and intermediate portions (loops 20 and legs 22).

Regarding claim 11, Simon discloses a retaining sleeve at the intermediate portion (sleeve 14).

Regarding claim 20, Simon discloses that the first and second filtering portions converge and are retained by a sleeve (sleeve 14).

Claim 9



Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,895,410 to Forber et al. in view of Kotula et al. '552.

Regarding claim 1, Forber discloses a vessel filter comprising a first filtering portion and a first anchoring portion, a transverse dimension of the first filtering portion in an expanded configuration being less than a transverse dimension of the first anchoring portion in an expanded configuration, an end portion of the first anchoring portion spaced from the first filtering portion converging to a first converging section (hub 102), and a second filtering portion and a second anchoring portion, a transverse dimension of the second filtering portion being less than a transverse dimension of the second anchoring portion, an end portion of the second anchoring portion spaced from the first filtering portion converging to a second converging section (hub 102),

the first and second filtering portions being positioned closer to each other than the first and second anchoring portions and the anchoring portions being formed on first and second opposite portions of the vessel filter (device 100). Forber discloses the claimed invention except for the device being configured to allow continuous blood flow therethrough while capturing clots. Kotula teaches that the pitch of the wires may be changed in order to make an occlusion device behave as a filter and allow blood to continue to filter to flow through (Column 4 lines 49-57). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Forber with the pitch changes of Kotula in order to provide the device of Forber with the capabilities of performing the functions of a filter.

10. Claims 4, 9, 10, 11, 12, 13, 19, 20, 21, 22, 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forber et al. '410 in view of Kotula et al. '552 as applied to claims 1, 2, 7 and 8 above, and further in view of U.S. Patent No. 6,231,581 to Shank et al.

Forber, as modified, discloses the claimed invention except for the particular shape of the anchoring member. Shank teaches a variety of anchoring members (see particularly FIGS. 21 and 22) that are used on implantable devices to secure the devices within a body by engaging the wall of the body (Column 2 lines 9-11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Forber, as modified, with an anchoring member of Shank, in order to secure the device to the wall of the body into which it is implanted.

11. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith '767 in view of Shank et al. '581.

Smith teaches the claimed invention except for the device being formed of three wires and the anchoring member comprising a tubular member. Smith discloses that the device may be made of any number of struts (Column 4 lines 35-40). Shank teaches a variety of anchoring members,

including anchors with lumens (FIGS 21 and 22), that are used to secure implantable devices to the wall of the body into which the device is implanted. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the device of Smith with three wires and to provide the device of Smith with an anchoring member with a lumen in order to secure the device to the wall.

Response to Arguments

12. Applicant's arguments with respect to claims 1-13 and 19-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica R Baxter whose telephone number is 703-305-4069. The examiner can normally be reached on M-F 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on 703-308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3590 for regular communications and 703-305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Jessica R Baxter
Examiner
Art Unit 3731

jrb
July 31, 2003

MICHAEL J. MILANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700